

REMARKS

Pursuant to the present amendment, claims 1, 30, 38, 52 and 56 have been amended. Claims 1-5, 7-26, 29-30, 32-38 and 40-62 are pending in the present application. No new matter has been introduced by way of the present amendment. Reconsideration of the present application is respectfully requested.

As an initial matter, the Examiner objected to the drawings. Enclosed herewith are the formal drawings which were originally submitted to the Patent Office on April 18, 2005, with the label "Replacement Sheet" indicated in the top margin of each page of the drawings. Withdrawal of the objection to the drawings is respectfully requested.

In the Office Action, claims 53-55 and 57-62 were allowed. Office Action, p. 10. The Examiner also indicated that claims 11-14, 25, 26, 35, 43-45, 49 and 50 would be allowable if rewritten in independent form. Office Action, p. 10.

The Examiner withdrew the previous indication of allowability of claims 6-10, 16, 23, 28, 29, 31, 35, 39-42, 49, 50 and 51 based upon the newly discovered patent issued to Grosso (U.S. Patent No. 4,013,945). Based upon the newly discovered reference, the Examiner issued several obviousness rejections. More specifically, claims 1-3, 7-10, 15-17, 38 and 40-42 were rejected based upon the combination of Stone (U.S. Patent No. 3,373,806) and Grosso. Claims 4-5 were rejected based upon the combination of Abramov (U.S. Patent No. 6,460,936), Grosso and Tubel (U.S. Patent No. 5,839,508). Claims 21-23 were rejected based upon the combination of Abramov, Grosso and Skoblo (WO 99/39080). Claims 24 and 51 were rejected based upon the combination of Stone, Grosso and Jürgens (U.S. Patent No. 4,415,823). Claim 29 was rejected based upon the combination of Stone, Grosso, Jürgens and Patton (U.S. Patent No. 3,968,473). Claim 32 was rejected based upon the combination of Abramov, Grosso and

Pearson (GB 2266546A). Claim 34 was rejected based upon the combination of Abramov, Grosso and Skoblo. Applicants respectfully traverse the Examiner's rejections.

Pursuant to the present amendment, independent claims 1, 30, 38, 52 and 56 have been amended to specifically recite that the subsea installation is positioned adjacent a floor of a body of water and beneath a surface of the body of water. The independent claims identified above have also been amended to recite that the turbine referenced in the claims is positioned above the floor and beneath the surface of the body of water. It is believed that such limitations were inherently present in the claims via use of the terms "subsea installation," as will be understood to those skilled in the art. Nevertheless, all of these independent claims have been amended to more precisely set forth this limitation.

It is respectfully submitted that Grosso, the newly identified reference, is very far afield from the present invention. Grosso is directed to the field of borehole telemetry. More specifically, Grosso is directed to an invention whereby borehole parameters are sensed and telemetered to the surface only when the drill string has ceased rotation or reached a predetermined low rate of rotation. Col. 1, ll. 4-11. Grosso notes that, for several classes of data, it is unnecessary to obtain readings more frequently than once every 30 feet or so of well depth. Grosso goes on to note that it would be desirable to turn off the downhole parameter sensing equipment during long periods of drilling to minimize wear which would otherwise result from the continuous operation of the parameter sensors. Col. 1, ll. 24-33.

The invention disclosed in Grosso "senses the state of absence of the rotation of the drill string, and the condition of no rotation [of the drill string] is used as a signal to activate the parameter sensing apparatus." Col. 1, ll. 36-39 (emphasis added). To that end, Grosso discloses a sensor 58 and other equipment to sense and distinguish "between periods of rotation and absence of rotation of the drill string." Col. 4, ll. 22-26 (emphasis added). While the drill string

is being rotated, the rotation sensor 58 is also being rotated in the ambient magnetic field of the earth. The apparatus disclosed in Grosso monitors signals produced by the rotation of the sensor 58 to determine when the drill string is no longer rotating (or rotating very slowly). At that time, various downhole parameters may be sensed.

Stone is directed to a method and apparatus for drilling and completing oil and gas wells. Col. 1, ll. 8-11. Stone discloses a Christmas tree 46 positioned adjacent a conductor pipe 14 of a well. Figure 3. Stone also discloses the use of a snorkel tube 44 and associated support 32 to complete the well. Col. 3, ll. 7-24. A flowline 62 extends upwardly from the wellhead through the snorkel tube 44 above the water line 64. Col. 4, ll. 45-49; Figure 3. Flowline 62 continues upwardly to a separator unit 68. A turbine 72 is mounted above the separator unit 68. Col. 4, ll. 55-59. The turbine 72 is adapted to supply electricity for a foghorn and light unit 76 mounted on top of the snorkel tube 44. A vent tube is provided in the top of the snorkel tube 44 to vent undesirable gases. The turbine 72 in Stone is located above the surface of the water 64.

Abramov is understood to be directed to a borehole mining tool that employs pressurized water to loosen the material to be mined. Abstract. To that end, Abramov discloses that a turbine 302 is positioned adjacent the end of the tool. See Figure 14. As with Stone, Abramov does not anticipate independent claim 58 for at least the reason that the turbine 302 disclosed therein is not positioned above the floor of the body of water and below the surface of the body of water as recited in claim 58. In Abramov, the turbine is positioned in a subterranean wellbore.

Tubel is directed to an electrical generating apparatus that is connected to production tubing. Abstract. The device described in Tubel is positioned within the casing 12 of a well 10, *i.e.*, the turbine disclosed therein is not positioned above the floor of the body of water and beneath the surface of the body of water.

Pearson is generally directed to a remote control apparatus for controlling underwater arrangements, such as subsea wellheads. Page 1, ¶ 1. In the device disclosed in Pearson, pressurized gas from a source 3 on an offshore platform 1 is supplied to the subsea installation via a conduit 8 and manifold/distributor 11. Abstract; Page 4, ¶ 2. Conduit 12 is used to supply pressurized gas to the two-stage turbine 13. Abstract; Page 4, ¶ 4. The supply conduit 12 has a coil arrangement 36 wound around a flowline 31 prior to entering the first stage of the turbine 13. Thus, the pressurized gas supplied to the turbine 13 is heated via the coil 36 by the hot product flowing through the flowline 31. A similar coil arrangement 38 is provided with conduit 37 to heat pressurized gas prior to the second stage of the turbine 13.

As the Examiner well knows, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to

combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991; *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

In this case, the prior art of record simply does not provide any suggestion or motivation to modify the prior art so as to arrive at Applicants' invention. As thus understood, it is respectfully submitted that Grosso is very far afield from the present invention. First, the turbine in Grosso is positioned in a wellbore and thus not part of the subsea installation as required by the rejected independent claims. Moreover, Grosso is fundamentally different from the pending claims in that the sensor does not sense any parameter associated with the turbine. Grosso employs a sensor which senses the rotational speed of the drill string. The operation of the turbine in Grosso is independent of the sensor disclosed therein.

More specifically, at no point does Grosso disclose or suggest a system that employs at least one sensor for sensing a rotational speed of the turbine, as recited in independent claim 1. Grosso is concerned with detecting the non-rotation of the drill string so that various downhole parameters can be sensed. Grosso is completely silent with respect to employing a sensor to sense the speed of the turbine. Thus, it is believed that the Examiner's rejection of independent claim 1 and all claims dependent therefrom is improper for at least this reason. Moreover, even

if the references were combined in the manner suggested by the examiner, the combination of references still would not disclose every limitation of the claimed invention. Accordingly, any such obviousness rejection would be legally improper.

Independent claim 30 is likewise believed to be allowable over the prior art of record. Neither Grosso nor Abramov disclose a subsea installation containing the recited elements. As indicated above, both Grosso and Abramov are directed to downhole systems that are employed for different purposes.

Independent claim 38 is likewise believed to be allowable. Claim 38 requires “sensing a rotational speed of said turbine.” As indicated above, Grosso is directed to sensing the rotation of the drill string. Grosso is not directed to sensing the rotational speed of the turbine. There is simply no suggestion in the art of record to modify the teachings of the prior art so as to arrive at Applicants’ invention. In Grosso, there is no need to sense the rotational speed of the turbine for purposes of the invention disclosed in Grosso. Moreover, even if the references were combined as suggested by the Examiner, the combination of prior art would still not disclose all of the claim limitations. Accordingly, the obviousness rejection would be improper for at least this additional reason.

Similar reasoning applies to independent claim 52. This claim requires a direction sensor for sensing the direction of rotation of the turbine. As indicated above, Grosso is simply not concerned with detecting the direction of rotation of the turbine for the purposes of the invention disclosed therein.

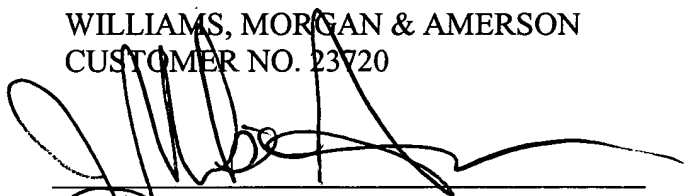
Independent claim 56 is likewise believed to be allowable. Neither Grosso nor Abramov are directed to subsea installations. Both Gross and Abramov disclose downhole systems. Accordingly, it is believed that independent claim 56 is likewise in condition for allowance.

It is respectfully submitted that any attempt to assert that the invention defined by the pending claims would have been obvious in view of the prior art of record necessarily involves an improper use of hindsight using Applicants' disclosure as a roadmap. A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

In view of the foregoing, it is respectfully submitted that all pending claims are in condition for immediate allowance. The Examiner is invited to contact the undersigned attorney at (713) 934-4055 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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